

109TH CONGRESS  
1ST SESSION

# S. 364

To establish a program within the National Oceanic and Atmospheric Administration to integrate Federal coastal and ocean mapping activities.

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## IN THE SENATE OF THE UNITED STATES

FEBRUARY 10, 2005

Mr. INOUE (for himself, Mr. STEVENS, Mr. LOTT, Ms. CANTWELL, Ms. SNOWE, Mr. KERRY, and Mr. LAUTENBERG) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To establish a program within the National Oceanic and Atmospheric Administration to integrate Federal coastal and ocean mapping activities.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Ocean and Coastal  
5 Mapping Integration Act”.

6       **SEC. 2. INTEGRATED OCEAN AND COASTAL MAPPING PRO-**  
7       **GRAM.**

8       (a) IN GENERAL.—The Administrator of the Na-  
9       tional Oceanic and Atmospheric Administration shall es-

1 tablish a program to develop, in coordination with the  
2 Interagency Committee on Ocean and Coastal Mapping,  
3 a coordinated and comprehensive Federal ocean and coast-  
4 al mapping plan for the Great Lakes and Coastal State  
5 waters, the territorial sea, the exclusive economic zone,  
6 and the continental shelf of the United States that en-  
7 hances ecosystem approaches in decision-making for con-  
8 servation and management of marine resources and habi-  
9 tats, establishes research priorities, supports the siting of  
10 research and other platforms, and advances ocean and  
11 coastal science.

12 (b) PROGRAM PARAMETERS.—In developing such a  
13 program, the Administrator shall work with the Com-  
14 mittee to—

15 (1) identify all Federal and federally-funded  
16 programs conducting shoreline delineation and ocean  
17 or coastal mapping, noting geographic coverage, fre-  
18 quency, spatial coverage, resolution, and subject  
19 matter focus of the data and location of data ar-  
20 chives;

21 (2) promote cost-effective, cooperative mapping  
22 efforts among all Federal agencies conducting ocean  
23 and coastal mapping agencies by increasing data  
24 sharing, developing data acquisition and metadata  
25 standards, and facilitating the interoperability of in

1 situ data collection systems, data processing,  
2 archiving, and distribution of data products;

3 (3) facilitate the adaptation of existing tech-  
4 nologies as well as foster expertise in new ocean and  
5 coastal mapping technologies, including through re-  
6 search, development, and training conducted in co-  
7 operation with the private sector, academia, and  
8 other non-Federal entities;

9 (4) develop standards and protocols for testing  
10 innovative experimental mapping technologies and  
11 transferring new technologies between the Federal  
12 Government and the private sector or academia;

13 (5) centrally archive, manage, and distribute  
14 data sets as well as provide mapping products and  
15 services to the general public in service of statutory  
16 requirements;

17 (6) develop specific data presentation standards  
18 for use by Federal, State, and other entities that  
19 document locations of federally-permitted activities,  
20 living and nonliving resources, marine ecosystems,  
21 sensitive habitats, submerged cultural resources, un-  
22 dersea cables, offshore aquaculture projects, and any  
23 areas designated for the purposes of environmental  
24 protection or conservation and management of living  
25 marine resources; and

1           (7) identify the procedures to be used for co-  
2           ordinating Federal data with State and local govern-  
3           ment programs.

4   **SEC. 3. INTERAGENCY COMMITTEE ON OCEAN AND COAST-**  
5                   **AL MAPPING.**

6           (a) ESTABLISHMENT.—There is hereby established  
7   an Interagency Committee on Ocean and Coastal Map-  
8   ping.

9           (b) MEMBERSHIP.—The Committee shall be com-  
10   prised of senior representatives from Federal agencies  
11   with ocean and coastal mapping and surveying responsibil-  
12   ities. The representatives shall be high-ranking officials of  
13   their respective agencies or departments and, whenever  
14   possible, the head of the portion of the agency or depart-  
15   ment that is most relevant to the purposes of this Act.  
16   Membership shall include senior representatives from the  
17   National Oceanic and Atmospheric Administration, the  
18   Chief of Naval Operations, the United States Geological  
19   Survey, Minerals Management Service, National Science  
20   Foundation, National Geospatial-Intelligence Agency,  
21   United States Army Corps of Engineers, United States  
22   Coast Guard, Environmental Protection Agency, Federal  
23   Emergency Management Agency and National Aero-  
24   nautics and Space Administration, and other appropriate  
25   Federal agencies involved in ocean and coastal mapping.

1 (c) CHAIRMAN.—The Committee shall be chaired by  
 2 the representative from the National Oceanic and Atmos-  
 3 pheric Administration. The chairman may create sub-  
 4 committees chaired by any member agency of the com-  
 5 mittee. Working groups may be formed by the full Com-  
 6 mittee to address issues of short duration.

7 (d) MEETINGS.—The Committee shall meet on a  
 8 quarterly basis, but subcommittee or working group meet-  
 9 ings shall meet on an as-needed basis.

10 (e) COORDINATION.—The committee should coordi-  
 11 nate activities, when appropriate, with—

12 (1) other Federal efforts, including the Digital  
 13 Coast, Geospatial One-Stop, and the Federal Geo-  
 14 graphic Data Committee;

15 (2) international mapping activities; and

16 (3) States and user groups through workshops  
 17 and other appropriate mechanisms.

18 **SEC. 4. NOAA INTEGRATED MAPPING INITIATIVE.**

19 (a) IN GENERAL.—Not later than 6 months after the  
 20 date of enactment of this Act, the Administrator, in con-  
 21 sultation with the Committee, shall develop and submit to  
 22 the Congress a plan for an integrated ocean and coastal  
 23 mapping initiative within the National Oceanic and At-  
 24 mospheric Administration.

25 (b) PLAN REQUIREMENTS.—The plan shall—

1           (1) identify and describe all ocean and coastal  
2 mapping programs within the agency, including  
3 those that conduct mapping or related activities in  
4 the course of existing missions, such as hydrographic  
5 surveys, ocean exploration projects, living marine re-  
6 source conservation and management programs,  
7 coastal zone management projects, and ocean and  
8 coastal science projects;

9           (2) establish priority mapping programs and es-  
10 tablish and periodically update priorities for geo-  
11 graphic areas in surveying and mapping, as well as  
12 minimum data acquisition and metadata standards  
13 for those programs;

14          (3) encourage the development of innovative  
15 ocean and coastal mapping technologies and applica-  
16 tions through research and development through co-  
17 operative or other agreements at joint centers of ex-  
18 cellence and with the private sector;

19          (4) document available and developing tech-  
20 nologies, best practices in data processing and dis-  
21 tribution, and leveraging opportunities with other  
22 Federal agencies, non-governmental organizations,  
23 and the private sector;

24          (5) identify training, technology, and other re-  
25 source requirements for enabling the National Oce-

1       anic and Atmospheric Administration's programs,  
 2       ships, and aircraft to support a coordinated ocean  
 3       and coastal mapping program;

4           (6) identify a centralized mechanism or office  
 5       for coordinating data collection, processing,  
 6       archiving, and dissemination activities of all such  
 7       mapping programs within the National Oceanic and  
 8       Atmospheric Administration, including—

9           (A) designating primary data processing  
 10       centers to maximize efficiency in information  
 11       technology investment, develop consistency in  
 12       data processing, and meet Federal mandates  
 13       for data accessibility; and

14          (B) designating a repository that is re-  
 15       sponsible for archiving and managing the dis-  
 16       tribution of all ocean and coastal mapping data  
 17       to simplify the provision of services to benefit  
 18       Federal and State programs; and

19          (6) set forth a timetable for implementation  
 20       and completion of the plan, including a schedule for  
 21       periodic Congressional progress reports, and rec-  
 22       ommendations for integrating approaches developed  
 23       under the initiative into the interagency program.

24       (c) NOAA JOINT OCEAN AND COASTAL MAPPING  
 25       CENTERS.—The Administrator is authorized to maintain

1 and operate up to 3 joint ocean and coastal mapping cen-  
2 ters, including a joint hydrographic center, which shall be  
3 co-located with an institution of higher education. The  
4 centers shall serve as hydrographic centers of excellence  
5 and are authorized to conduct activities necessary to carry  
6 out the purposes of this Act, including—

7           (1) research and development of innovative  
8           ocean and coastal mapping technologies, equipment,  
9           and data products;

10           (2) mapping of the United States outer conti-  
11           nental shelf;

12           (3) data processing for non-traditional data and  
13           uses;

14           (4) advancing the use of remote sensing tech-  
15           nologies, for related issues, including mapping and  
16           assessment of essential fish habitat and of coral re-  
17           sources, ocean observations and ocean exploration;  
18           and

19           (5) providing graduate education in ocean and  
20           coastal mapping sciences for National Oceanic and  
21           Atmospheric Administration Commissioned Officer  
22           Corps, personnel of other agencies with ocean and  
23           coastal mapping programs, and civilian personnel.



1 **SEC. 5. INTERAGENCY PROGRAM REPORTING.**

2 No later than 18 months after the date of enactment  
3 of this Act, and bi-annually thereafter, the Chairman of  
4 the Committee shall transmit to the Senate Committee on  
5 Commerce, Science, and Transportation and the House of  
6 Representatives Committee on Resources a report detail-  
7 ing progress made in implementing the provisions of this  
8 Act, including—

9 (1) an inventory of ocean and coastal mapping  
10 data, noting the metadata, within the territorial seas  
11 and the exclusive economic zone and throughout the  
12 continental shelf of the United States, noting the  
13 age and source of the survey and the spatial resolu-  
14 tion (metadata) of the data;

15 (2) identification of priority areas in need of  
16 survey coverage using present technologies;

17 (3) a resource plan that identifies when priority  
18 areas in need of modern ocean and coastal mapping  
19 surveys can be accomplished;

20 (4) the status of efforts to produce integrated  
21 digital maps of ocean and coastal areas;

22 (5) a description of any products resulting from  
23 coordinated mapping efforts under this Act that im-  
24 prove public understanding of the coasts, oceans, or  
25 regulatory decision-making;

1           (6) documentation of minimum and desired  
2 standards for data acquisition and integrated  
3 metadata;

4           (7) a statement of the status of Federal efforts  
5 to leverage mapping technologies, coordinate map-  
6 ping activities, share expertise, and exchange data;

7           (8) a statement of resource requirements for or-  
8 ganizations to meet the goals of the program, includ-  
9 ing technology needs for data acquisition, processing  
10 and distribution systems;

11           (9) a statement of the status of efforts to de-  
12 classify data gathered by the Navy, the National  
13 Geospatial-Intelligence Agency and other agencies to  
14 the extent possible without jeopardizing national se-  
15 curity, and make it available to partner agencies and  
16 the public; and

17           (10) a resource plan for a digital coast inte-  
18 grated mapping pilot project for the northern Gulf  
19 of Mexico that will—

20               (A) cover the area from the authorized  
21 coastal counties through the territorial sea;

22               (B) identify how such a pilot project will  
23 leverage public and private mapping data and  
24 resources, such as the United States Geological  
25 Survey National Map, to result in an oper-

1           ational coastal change assessment program for  
2           the subregion; and

3           (11) the status of efforts to coordinate Federal  
4           programs with State and local government programs  
5           and leverage those programs.

6 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

7           (a) IN GENERAL.—In addition to the amounts au-  
8           thorized by section 306 of the Hydrographic Services Im-  
9           provement Act of 1998 (33 U.S.C. 892d), there are au-  
10          thorized to be appropriated to the Administrator to carry  
11          out this Act—

- 12           (1) \$20,000,000 for fiscal year 2006;
- 13           (2) \$26,000,000 for fiscal year 2007;
- 14           (3) \$32,000,000 for fiscal year 2008;
- 15           (4) \$38,000,000 for fiscal year 2009; and
- 16           (5) \$45,000,000 for each of fiscal years 2010  
17          through 2013.

18          (b) JOINT OCEAN AND COASTAL MAPPING CEN-  
19          TERS.—Of the amounts appropriated pursuant to sub-  
20          section (a), the following amounts shall be used to carry  
21          out section 4(c) of this Act:

- 22           (1) \$10,000,000 for fiscal year 2006.
- 23           (2) \$11,000,000 for fiscal year 2007.
- 24           (3) \$12,000,000 for fiscal year 2008.
- 25           (4) \$13,000,000 for fiscal year 2009.

1           (5) \$15,000,000 for each of fiscal years 2010  
2           through 2013.

3           (c) INTERAGENCY COMMITTEE.—Notwithstanding  
4 any other provision of law, from amounts authorized to  
5 be appropriated for fiscal years 2006 through 2013 to the  
6 Department of Defense, the Department of the Interior,  
7 the Department of Homeland Security, the Environmental  
8 Protection Agency, and the National Aeronautics and  
9 Space Administration, the head of each such department  
10 or agency may make available not more than \$10,000,000  
11 per fiscal year to carry out interagency activities under  
12 section 3 of this Act.

13 **SEC. 7. DEFINITIONS.**

14           In this Act:

15           (1) ADMINISTRATOR.—The term “Adminis-  
16           trator” means the Administrator of the National  
17           Oceanic and Atmospheric Administration.

18           (2) COASTAL STATE.—The term “coastal state”  
19           has the meaning given that term by section 304(4)  
20           of the Coastal Zone Management Act of 1972 (16  
21           U.S.C. 1453(4)).

22           (3) COMMITTEE.—The term “Committee”  
23           means the Interagency Ocean Mapping Committee  
24           established by section 3.

1           (4) EXCLUSIVE ECONOMIC ZONE.—The term  
2       “exclusive economic zone” means the exclusive eco-  
3       nomic zone of the United States established by Pres-  
4       idential Proclamation No. 5030, of March 10, 1983.

5           (5) OCEAN AND COASTAL MAPPING.—The term  
6       “ocean and coastal mapping” means the acquisition,  
7       processing, and management of physical, biological,  
8       geological, chemical, and archaeological characteris-  
9       tics and boundaries of ocean and coastal areas, re-  
10      sources, and sea beds through the use of acoustics,  
11      satellites, aerial photogrammetry, light and imaging,  
12      direct sampling, and other mapping technologies.

13          (6) TERRITORIAL SEA.—The term “territorial  
14      sea” means the belt of sea measured from the base-  
15      line of the United States determined in accordance  
16      with international law, as set forth in Presidential  
17      Proclamation Number 5928, dated December 27,  
18      1988.

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